

1 *a!* Figure 25 is a schematic diagram of an exemplary level shift or for use in the  
2 *cancel* controller of Figure 18; and

3 Figure 26 is a schematic diagram of an exemplary voltage controller suitable for  
4 use in the controller of Figure 18.--

5  
6 *OK* On page 38, line 20, please change "Figure 26" to --Figure 25-- to correct a  
7 typographical error made without deceptive intent.

8  
9 **IN THE CLAIMS**

10 Please cancel claims 1-21 and 23-26, without prejudice.

11  
12 22. (amended) An active noise canceling system comprising:

13 a sound generator, responsive to drive signals applied thereto, for generating an  
14 anti-noise field;

15 *cancel* a noise cancellation processor, for generating the drive signals to the sound  
16 generator;

17 *cancel* a first sound sensor disposed within said anti-noise field to generate a residual  
18 signal indicative of the sum of ambient sounds and anti-noise impinging on the  
19 sensor,[:] wherein said noise cancellation processor processes the residual signal to  
20 form a component of the anti-noise field; and

21 [a noise cancellation processor, for generating the drive signals to the sound  
22 generator; and]

23 means for generating indicia of the level of ambient noise and responsively  
24 varying the transfer function of the system in response to said indicia of amplitude of  
25 ambient noise such that a gain of the system is decreased in response to a decrease in  
26 said indicia of amplitude of ambient noise.

1 27. (amended) A method for increasing the stability of an active noise cancelling  
2 system comprising a noise cancellation circuit, a sound sensor and sound generator  
3 cooperating in a feedback loop, the feedback loop having an associated transfer  
4 function, [the transfer function with respect to components of ambient noise within a  
5 predetermined range of frequencies tending to vary with approaching instability of the  
6 system,] the method including the steps of:

7 generating, in accordance with drive signals, an anti-noise field;

8 *sub C2* sensing the residual noise resulting from interaction of the anti-noise and  
9 *as* ambient noise;

10 generating the drive signals in accordance with said sensed residual noise;

11 sensing ambient noise outside of the anti-noise field; and

12 feeding forward a first range of frequencies that includes at least the high  
13 frequency components of the ambient noise to effect feedforward cancellation thereof;

14 wherein a feedback signal, generated by the feedback loop that processes a  
15 second range of frequencies, is processed by a noise cancellation processor without  
16 affecting the transfer function of the feedback loop to form a component of said anti-  
17 noise field, and

18 wherein the first range of frequencies and the second range frequencies  
19 substantially overlap in a cancellation band below an enhancement frequency range.  
20

21 28. (new claim) An active noise canceling system, comprising:

22 a sound generator for generating an anti-noise field in response to drive signals  
23 *a4* applied thereto;

24 a first sound sensor, disposed within an anti-noise field, for generating a residual  
25 signal indicative of the sum of ambient noise and anti-noise impinging on the sensor;